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A NEW RAPID BINARY STAR.

Recent measures of the double star A. 88 = Ll. 34524, which was discovered with the 36-inch telescope on June 2, 1900, have confirmed the fact suggested by the earlier measures that this pair is in rapid orbital motion. The mean results of measures for the three years are:—

1900.46	353°.2	0″.14	6.9–7.1	3^n	36-inch
1901.56	338 .3	0 .14		3	36-inch
1902.66	318 .1	0 .12		3	36-inch

The star's position for 1900.0 is:—

R.A. $18^h\ 33^m\ 9^s$; Decl. — 3° 17′

September 9, 1902.

R. G. AITKEN.

THE DISCOVERY OF 83 *AQUARII* AS A DOUBLE STAR.

In the course of my search for new double stars I examined the star 83 *Aquarii* with the 12-inch telescope on the night of July 29, 1902, and noted that it was apparently elongated. On August 16th an examination with the 36-inch telescope confirmed the fact of its duplicity. Measures have been obtained as follows:—

	θ	ρ	Seeing.	Eye-piece.	
1902.624	55°.8	0″.21	2+	1500	36-inch
.640	63 .8	0 .16	3	1500	36-inch
.643	62 .7	0 .20	3	1500	36-inch
.660	61 .5	0 .18	3	1500	36-inch
1902.64	61°.0	0″.19			

The two components are sensibly equal in brightness, each being estimated as of the sixth magnitude.

It is already evident that this pair of stars forms a physical system, for according to AUWERS it has an annual proper motion of 0″.023 in 17°.5. If this were not common to both components, the pair would have been an easy one in STRUVE's time, and would have been listed by him when he catalogued 83 and 84 *Aquarii* as the wide pair Σ 59ˡ.

The position of the star for 1900.0 is—

R.A. $22^h\ 59^m\ 57^s$; Decl. — 8° 14′

September 9, 1902.

R. G. AITKEN.